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# Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
	10/747,949	JEONG, SEOK HWA
Office Action Summary	Examiner	Art Unit
	Stephen Alvesteffer	2175
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on 23 Ju 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Example 2.	s action is non-final.  nce except for formal matters, pro	
Disposition of Claims		
4)	wn from consideration. e rejected.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate

### **DETAILED ACTION**

## Response to Amendment

This Office Action is responsive to the Response filed July 23, 2009. No claims were amended. Claims 4-6, 13, 23-25, 40-43, and 47-49 were previously cancelled. Claims 1, 21, and 46 are independent. Claims 1-3, 7-12, 14-22, 26-39, and 44-46 remain pending.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7, 9-12, 14-22, 26, 28-37, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanyo Multimedia Projector PLV-70 Owner's Manual (hereinafter Sanyo) and Hung-yi, United States Patent Application Publication 2003/0191960. The Sanyo reference was retrieved from http://www.projectorcentral.com/pdf/projector\_manual\_1730.pdf, published to the public on or before August 2002 according to the "First Ship" date found on the product data page at http://www.projectorcentral.com/Sanyo-PLV-70.htm?print=1.

**Regarding claim 1**, Sanyo substantially teaches a method of providing an advance screen saver warning for a display apparatus, the method comprising:

predetermining a screen saver standby time and an advance screen saver warning time (see Sanyo page 37 "Power management"; the advance screen saver warning time is set to 5 minutes and the screen saver standby time can be the same as the advance screen saver warning time);

counting a current system idle time during which no system input activity is detected (see Sanyo page 37 "Power management"; "This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period", the apparatus of Sanyo counts the time in which the projector is not used, which is equivalent to counting a current system idle time);

activating an advance screen saver warning before activating a screen saver if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time (see Sanyo page 37 "Power management"; in Sanyo, the advance screen saver warning is activated immediately upon interruption of the input signal); and

continuously displaying the activated advance screen saver warning by the display apparatus until system activity by a user of the system is detected (see Sanyo page 37 "Power management"; ""No signal" and counting down display appears (for 5 minutes)");

deactivating the advance screen saver warning so that it is no longer displayed, wherein the screen saver is activated only if the advance screen saver warning time is completed (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is

not pressed over 5 minutes... Projection Lamp is automatically turned on when input signal connected or projector is operated with any button on Top Control or on Remote Control Unit again"); and

controlling, during the continuous execution of the advance screen saver warning, the display apparatus to output at least one of a specified sound and a visual warning message window indicative of a time difference between the screen saver standby time and current system idle time (see Sanyo page 37, "No signal 4:50" figure on bottom right corner).

Sanyo does not teach a screen saver. However, a screen saver is functionally equivalent to turning the projection lamp off as in Sanyo. Both are methods of preserving the life of the display equipment when not in use, and are often used interchangeably or in combination. Hung-yi discloses a similar invention in which a warning countdown is displayed on screen prior to the computer starting a screen saver to keep the computer locked in wait (see Hung-yi paragraph [0010]; "within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main program thereof will automatically start said screen saver to keep the computer locked in wait"). It would have been obvious to one having ordinary skill in the art having the references of Sanyo and Hung-yi laid before him at the time the invention was made, to provide an advance

warning countdown that a screensaver or other screen preservation technique will soon go into effect.

Regarding claim 2, Sanyo/Hung-yi teaches deactivating the advance screen saver warning and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Sanyo page 37 "Power management"; "This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period").

Regarding claim 3, Sanyo/Hung-yi teaches that the deactivating the advance screen saver warning and the activating the screen saver are performed simultaneously (see Sanyo page 37 "Power management"; "This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period").

**Regarding claim 7**, Sanyo/Hung-yi teaches that the visual warning message window includes at least one of a textual representation and a graphical representation indicating the remaining time (see Sanyo page 37, "No signal 4:50" figure on bottom right corner).

**Regarding claim 9**, Sanyo/Hung-yi teaches that the visual warning message window is displayed on a predetermined screen portion of the display screen, which is automatically determined by default or is manually determined by an operator (see Sanyo page 37, "No signal 4:50" figure on bottom right corner).

**Regarding claim 10**, Sanyo/Hung-yi teaches undisplaying the visual warning message window from the display screen if any system input activity is detected (see Sanyo page 37 "Power management"; "*Power Management function operates to turn* 

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Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes").

Regarding claim 11, Sanyo/Hung-yi teaches undisplaying the visual warning message window and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes").

**Regarding claim 12**, Sanyo/Hung-yi teaches that the visual warning message window is an on-screen-display (OSD) window (see Sanyo page 37, "No signal 4:50" figure on bottom right corner).

Regarding claim 14, Sanyo/Hung-yi teaches that the specified sound is any one of a computer-generated sound and a human voice indicating a time until the screen saver is activated (see Hung-yi paragraph [0010]; "said main program thereof will send out a warning signal and sound to remind the user of the time-limit").

Regarding claim 15, Sanyo/Hung-yi teaches that the screen saver standby time is a total length of system idle time that must elapse before activating the screen saver (see Sanyo page 37 "Power management"; "This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period").

Regarding claim 16, Sanyo/Hung-yi teaches that the advance screen saver warning time is a length of time during which the advance screen saver warning is continuously activated before activating the screen saver (see Sanyo page 37 "Power management"; ""No signal" and counting down display appears (for 5 minutes)").

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Regarding claim 17, Sanyo/Hung-yi teaches that the screen saver standby time is predetermined to an automatically assigned default value or a manually selected value (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes").

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Regarding claim 18, Sanyo/Hung-yi teaches that the advance screen saver warning time is predetermined to an automatically assigned default value or a manually selected value (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes").

Regarding claim 19, Sanyo/Hung-yi teaches that the system input activity includes at least one of a horizontal synchronization signal, a vertical synchronization signal, and a manual user input (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes").

Regarding claim 20, Sanyo/Hung-yi teaches that the manual user input is made by a user through a keyboard or mouse (see Sanyo page 37 "Power management"; "Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes"; see also Hung-yi claim 4; "said main program thereof loaded on a main computer can lock the keyboards and mouse connected to the computers on the workstation").

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Claims 21, 22, 26, 28-37 recite a display apparatus having substantially the same limitations as the method of claims 1, 3, 7, 9-12, 20, 14-16, 19, and 20.

Therefore, the claims are rejected under the same rationale.

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Claim 46 recites a method having substantially the same limitations as the method of claim 11. Therefore, claim 46 is rejected under the same rationale.

Claims 8, 27, 38, 39, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanyo (Non-patent) *supra*, Hung-yi (2003/0191960) *supra*, and Pollack, United States Patent 5,153,580.

Regarding claim 8, Sanyo/Hung-yi teaches every limitation of claim 8 except that the graphical representation included in the warning message window is any one of a bar-type graph, a clock-type graph with a moving indicator, and a pie-type graph. Pollack teaches a retriggerable sleep timer display having a bar graph display indicating the time remaining until the display turns off (see Pollack Figure 5 and column 6 line 63 through column 7 line 20; "In FIG. 5, a bar graph 520 is displayed along with the video on a screen 510 of a television receiver 500. The bar may be indicative of time remaining until turn off"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a graphical indication of the remaining time as taught by Pollack with the invention of Sanyo/Hung-yi in order to provide users with a visual warning of a disruptive event such as the screen saver coming on.

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Claim 27 recite a display apparatus having substantially the same limitations as the method of claims 8 respectively. Therefore, the claims are rejected under the same rationale.

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Regarding claim 38, Sanyo/Hung-yi/Pollack teaches a memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time (see Pollack column 2 line 53 through column 3 line 9; "Microcomputer 110 includes program memory (ROM) 112, and stores channel-related data in a random-access memory (RAM) 120. RAM 120 may be either internal to, or external to, microprocessor 110, and may be of either the volatile or non-volatile type. The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM). One skilled in the art will recognize that if volatile memory is utilized, that it may be desirable to use a suitable form of standby power to preserve its contents when the receiver is turned off").

Regarding claim 39, Sanyo/Hung-yi/Pollack teaches that the memory is an Electrically Erasable Programmable Read-only Memory (EEPROM) (see Pollack column 2 line 53 through column 3 line 9; "The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM)").

Regarding claim 44, Sanyo/Hung-yi/Pollack teaches that the predetermined screen saver standby time and advance screen saver warning time are manually set by a user of the display apparatus (see Pollack column 1 lines 16-25; "Many modern television receivers include a so-called sleep timer function for automatically turning the receiver off after a predetermined time interval set by a user").

Claim 45 recites a display apparatus with substantially the same limitations as the method of claim 44. Therefore, claim 45 is rejected under the same rationale.

# Response to Arguments

Examiner notes that in the Office Action filed May 27, 2009, claim 49 was listed as rejected in error. Claim 49 was previously cancelled and therefore its rejection is withdrawn.

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

 Shaffer et al. (US 6,384,853) Apparatus and method for preventing screen savers from shutting down ToL clients

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571)270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Stephen Alvesteffer Examiner Art Unit 2175

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